United States District Court, Northern District of Illinois

Name of Assigned Judge or Magistrate Judge			John W	. Darrah	Sitting Judge if Other than Assigned Judge					
CASE NUMBER			02 C	2590	DATE	7/7/2	2004			
CASE TITLE			Aero Products Intl. Vs. Intex Recreation Corp.							
			[In the following box (a) of the motion being pre-	(a) indicate the party filing the motion, e.g., plaintiff, defendant, 3rd party plaintiff, and (b) state briefly the nature resented.]						
DOCKET ENTRY:										
(1)	□ F	Filed motion of [use listing in "Motion" box above.]								
(2)		Brief in support of motion due								
(3)		Answer brief to motion due Reply to answer brief due								
(4)		Ruling/Hearing on set for at								
(5)		Status hearing[held/continued to] [set for/re-set for] on set for at								
(6)		Pretrial conference[held/continued to] [set for/re-set for] on set for at								
(7)	_ T	Trial[set for/re-set for] on at								
(8)	[:	[Bench/Jury trial] [Hearing] held/continued to at								
(9)		This case is dismissed [with/without] prejudice and without costs[by/agreement/pursuant to] ☐ FRCP4(m) ☐ Local Rule 41.1 ☐ FRCP41(a)(1) ☐ FRCP41(a)(2).								
(10)	[Other docket entry] For the reasons stated in the attached memorandum opinion and order, judgment is entered for plaintiffs and against defendants on defendants' defense of indefiniteness. Enter Memorandum Opinion and Order.									
(11)	, 1	For fi	urther detail see order	r attached to the origi	nal minute order.]					
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UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

AERO PRODUCTS INTERNATIONAL, INC., a Florida corporation, and ROBERT B. CHAFFEE, an individual, Plaintiffs,)))	
v.) No: 02 C 2590	
INTEX RECREATION CORPORATION, a California corporation; QUALITY TRADING, INC., a California corporation; and) Judge John W. Darrah)))	
WAL-MART STORES, INC., a Delaware corporation,)	
Defendants.)	

OPINION AND ORDER

The Plaintiffs, Aero Products International, Inc. ("Aero") and Robert B. Chaffee, filed suit against the Defendants, Intex Recreation Corporation ("Intex"); Quality Trading, Inc.; and Wal-Mart Stores, Inc. Plaintiffs alleged Defendants infringed U.S. Patent No. 5,367,726 ("the '726 patent"). A trial with a jury was held, but the issue of whether Defendants' defense of indefiniteness applies is a question of law reserved for the Court's determination. Defendants argue that the terms "substantially hermetic seal" and "complete hermetic seal" are ambiguous and inconsistent, and that the limitation in claim 12 requiring the circular lip to protrude radially inward is inconsistent with the limitation in claim 13 requiring the same lip to protrude radially inward at an oblique angle.

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Plaintiffs argue that the claim of indefiniteness raises an issue of law resolved by the Court in construing the claims. This the Court has done pursuant to a *Markman* hearing conducted before trial. Plaintiffs further point out that Defendants have conceded there are no factual issues relevant to indefiniteness and that Defendants have not responded to the Court's invitation to present any evidence or request a hearing on the issues. Defendants insist the Court must sit as the trier of fact.

To the extent that resolution of the issue is to be considered a bench trial, the Court has considered the evidence, including the testimony of witnesses, exhibits, stipulations, the written arguments of counsel for the parties and the authority cited therein.

Pursuant to Federal Rule of Civil Procedure 52, the Court hereby enters the following written Findings of Fact and Conclusions of Law which are based upon consideration of all admissible evidence as well as the Court's determination of the credibility of the witnesses. To the extent that Findings of Fact, as stated, may be considered Conclusions of Law, they shall be deemed Conclusions of Law. Similarly, to the extent that matters expressed as Conclusions of Law may be considered Findings of Fact, they shall also be deemed Findings of Fact.

FINDINGS OF FACT

Plaintiffs are the holders of the relevant patent, the '726 patent. The '726 patent relates to the technology of inflatable air mattresses. Defendants sell inflatable air products, including inflatable air mattresses.

¹ For a more detailed discussion of the claim construction adopted in this matter, see this Court's January 28, 2004 opinion in *Aero Prods. Int'l, Inc. v. Intex Recreation Corp.*, 2004 WL 407028 (N.D. Ill. Jan. 28, 2004).

Claim 9 of the '726 patent states, in relevant part:

An inflatable support system, comprising:

an inflatable body having an interior, an exterior, and inflation input for transfer of air between the interior and the exterior; and

a one-way valve, disposed between the interior and the inflation input, for controlling the transfer of air, providing a substantially hermetic seal under low pressure conditions, such valve including:

a circular lip, disposed peripherally in the passageway and protruding radially inward, having a first surface generally facing the interior, defining a valve seat

Claim 12 of the '726 patent states:

An inflatable body comprising:

an inflatable bladder having an interior and an inflation input;

a one-way valve disposed between the interior and the inflation input providing a substantially hermetic seal under low pressure conditions, such valve including:

a passageway having a generally circular cross section and a first end in communication with the interior and a second end in communication with the inflation input;

a circular lip, disposed peripherally in the passageway and protruding radially inward, having a first surface generally facing the interior, defining a valve seat:

a flexible circular diaphragm, having an inner surface generally facing the interior and an outer surface facing away from the interior, mounted for axial movement in the passageway away from and against the valve seat in the respectively open and closed positions of the valve, so that (i) the act of inflation of the bladder under low pressure is sufficient to cause axial motion of the valve into the open position to permit the large influx of air and (ii) following inflation of the bladder, air pressure created in the interior the bladder by inflation thereof causes an outer annular region of the outer surface of the diaphragm to be urged into engagement against the valve seat to provide a complete hermetic seal when the valve is in the closed position; and

stiffening means for reducing flexing of the diaphragm except in its outer annular region.

Claim 13, a claim dependent on claim 12, states: "An inflatable bed according to claim

12, wherein the first surface is disposed at an oblique angle with respect to the radius of the passageway."

After briefing by the parties and a *Markman* hearing, the relevant terms were construed as follows: (1) a "substantially hermetic seal" is a seal that is nearly or largely impervious to air; (2) "complete hermetic seal" means a seal that does not require any additional parts to retain nearly or largely all of the air in the bed; and (3) "protruding radially inward" means that the lip is positioned towards the center of the device in question and remains placed along the whole radius throughout the whole piece.

At trial, Dr. Albert Karvelis, an expert witness for Plaintiffs, testified about the '726 patent. According to Dr. Karvelis, a "substantially hermetic seal" used in air mattresses must hold air in the mattress. Dr. Karvelis also stated that a "complete hermetic seal" requires no additional parts to retain the air in the mattress. These terms, when read in combination and in light of the specification of the '726 patent, would be understandable to a person of ordinary skill in the art.

Dr. Karvelis further testified that an inconsistency does not exist between claims 12 and 13. Claim 12 only requires that the circular lip be pointed towards the center of the passageway but does not specify what angle the circular lip points towards the center. In contrast, Claim 13 specifically requires that the circular lip be pointed towards the center of the passageway at an oblique angle, which is an angle that is not perpendicular.

CONCLUSIONS OF LAW

Defendants seek to bar Plaintiffs' patent claims on the grounds of indefiniteness. Under 35 U.S.C. § 112, ¶ 2, a patentee shall "particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention." Making this determination is a question of law "that is drawn from the court's performance of its duty as the construer [sic] of patent

claims." Bancorp Servs., L.L.C. v. Hartford Life Ins. Co., 359 F.3d 1367, 1371 (Fed. Cir. 2004) (Bancorp) (citation omitted). Moreover, issues of indefiniteness do not depend on underlying factual disputes, but extrinsic evidence may be considered to help determine whether a claim is indefinite. See Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1375 (Fed. Cir. 2001) (Exxon).

To decide whether a claim is indefinite, "a court must determine whether those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Bancorp*, 359 F.3d at 1371. If a claim is subject to construction, it is not invalid on indefiniteness grounds. *Bancorp*, 359 F.3d at 1371. Thus, because of the statutory presumption of patentability under 35 U.S.C. § 282, "close questions of indefiniteness in litigation involving issued patents are properly resolved in the favor of the patentee." *Bancorp*, 359 F.3d at 1371 (citation omitted).

Claims that include terms such as "substantially" do not automatically render a claim indefinite. See Exxon, 265 F.3d 1371, 1377. "The degree of precision necessary for adequate claims is a function of the nature of the subject matter." Miles Labs., Inc. v. Shandon, Inc., 997 F.2d 870, 875 (Fed. Cir. 1993). A claim limitation does not need to be explicitly included in the specification, as long as one skilled in the art would be able to discern that the claim language reflects the disclosure of the specification. All Dental Prodx, LLC v. Advantage Dental Prods., 309 F.3d 774, 779 (Fed. Cir. 2002).

In addition, when there is an irreconcilable contradiction within a patent, then the claims subject to this contradiction are indefinite. See Allen Eng'g Corp. v. Bartell Indus., 299 F.3d 1336, 1349 (Fed. Cir. 2002). However, the use of two similar but different terms in close

proximity to each other infers that each term should be given a different meaning. See Bancorp, 359 F.3d at 1373.

DECISION

Defendants first argue that the term "substantially hermetic seal" is indefinite "because no specifics are given regarding the amount of leakage that a seal can allow and still be considered 'substantially hermetic." Def.'s Proposed Conclusion of Law ¶ 4. Defendants also argue that the specification gives no guidance to the term. Defendants further argue that this term is ambiguous because a hermetic seal does not leak, and the term "substantially hermetic seal" is contradictory because it does leak.

However, the term has already been construed in a *Markman* proceeding, and, as such, has already been found to be definite. Also, a person skilled in the relatively simple art of air mattresses and valves would be able to discern this term reflects the disclosure of the specification and requires the valve and the air mattress to retain enough so that the mattress may be slept on without losing its shape. Moreover, adding the term "substantially" is not contradictory to a hermetic seal; instead, "substantially" implies that the hermetic seal is not a perfect seal.

Defendants next contend that the term "complete hermetic seal" has no meaning and is contradictory to the term "substantially hermetic seal." As construed earlier in a *Markman* proceeding, the term "complete hermetic seal" describes the status of the seal, not the quality of the seal. This conclusion is highlighted by the context of the claim, which uses "substantially" to describe the seal's retention of air and "complete" – instead of "completely" – to describe the status of the seal. These terms are also in close proximity to each other, and it can be inferred

that they have separate meanings. Therefore, "complete hermetic seal" is not contradictory, is amenable to a claim construction, and is, thus, not indefinite.

Defendants also assert that both "substantially hermetic seal" and "complete hermetic seal" were added in amendments to overcome close prior art and the meanings of these terms are not discernable from any disclosure in the patent. Thus, according to Defendants, these terms are indefinite. However, as discussed above, the meaning of these terms are discernable from the patent's disclosure.

Lastly, Defendants argue that the limitation in claim 12, requiring the circular lip to protrude radially inward, is inconsistent with the limitation in dependent claim 13, requiring the same lip to protrude radially inward at an oblique angle. There is no requirement in claim 12 that the circular lip point inward perpendicular to the center of the device; but, rather, the circular lip may point inward at any angle, including an oblique angle. Accordingly, claims 12 and 13 are not indefinite.

CONCLUSION

For the foregoing reasons, judgment is entered for Plaintiffs and against Defendants on Defendants' defense of indefiniteness.

Dated:

JOHN W. DARRAH

United States District Judge